# **TECHNOLOGY TRACK**

# TT115, Distance Education-Linux (DE-Linux)

#### Who Should Attend

DCIO and CI investigators and prospective lab examiners.

Prerequisites Duration

NONE 60 hours / Six Weeks

# **Course Description**

Provides a basic understanding of the usage and administration of Linux operating systems from the ground up including important files, directories, and utilities. Presents Linux concepts and technologies used by investigators and the targets of their investigations through the use of online lecture, assignments and practical exercises.

#### **Objectives**

- Describe the history, installation and configuration procedures, significant directories, and basic command line functions of Linux
- Explain Linux file system structure, mounting functions, and storage permissions
- Perform basic user administration to manage system users and groups
- Apply management tools to add, configure, or update the Linux Kernel and/or additional software packages
- Use system tools to manage how a Linux computer starts, runs, and what the operator is permitted to do while using the computer
- Explain the configuration of network devices and services that are available in Linux

#### **Topics Covered**

### Navigating Linux

- Basic Linux Commands
- Common Files and Directories
- Output Redirection and Piping

## User and Group Administration

- Managing User Accounts and Groups
- Understanding the User Environment

#### System Startup and Services

• Initialization and Services

#### Linux Networking

Network Interfaces and Services

#### Installation and Applications

- Preparing Applications for installation
- Installing an Application from Source
- Installing an Application from a Package Manager

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## System Maintenance

- System Patching
- Compiling a Linux Kernel
- Managing System Modules
- Linux File Systems

## Preparation

To prepare for this course, we recommend the following review, reading, or research:

- Review CompTIA Linux+ material available on the Internet
- Read online/printed material introducing the Linux operating system

These topics are covered in DCITA courses you may have attended previously and can also be found on the dcita.edu portal (https://www.dcita.edu), the internet, at Books 24/7, in your organization's technical library or at the public library.

# **DE-Linux Grading Policy**

Student progress is monitored through instructor observation of student participation in assignments, practical exercises and Knowledge Tests. Minimum passing score on all DCITA tests is 70%.